Images in Clinical Tropical Medicine
About to Burst

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This 29-year-old woman from Afghanistan presented with intractable cough. Imaging showed she had a cystic lesion in her lung and two large unilocular cysts consistent with cystic echinococcosis (Figure 1). A day before the surgery, she coughed up copious amounts of white sputum, called vomica, indicating rupture of the lung cyst. It was resected and she was treated with perioperative albendazole and praziquantel.

We then began to discuss management of the liver cysts, trying to decide between puncture, aspiration, injection, reaspiration (PAIR) or surgical resection.1,3–5 However, during her recovery about 6 weeks after resection of the lung cyst, she presented with abdominal pain. Her abdominal imaging was redone, and the classic signs of ruptured hydatid are seen (Figure 2). Though there is not much evidence on the subject, anecdotally, surgeons describe softening and decrease in turgidity of large hydatid cysts with medical therapy.2 Given the almost simultaneous change in both cysts, we postulate that the perioperative antiparasitic therapy for the pulmonary cyst may have been a contributor to the rupture of the large hepatic cysts. The cysts were removed operatively on an emergent basis with no evidence of intraperitoneal spillage.

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Figure 1. Computed tomography (CT) image of two large, unilocular hepatic hydatid cysts.

Figure 2. Computed tomography (CT) image of the same two ruptured unilocular hydatid cysts with the clearly visible cyst walls collapsed away from the liver. This is known as the “serpent sign.”

Figure 3. Gross pathology of resected liver with visible jelly-like membrane consistent with hydatid cyst.
(Figure 3). The patient did quite well post-operatively with no recurrence of hydatid disease thus far.

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